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ABSTRACT

A practicum addressed the high percentage of high-level high school students not making minimum Scholastic Aptitude Test (SAT) verbal scores required by area colleges for placement in regular college course work. Two advanced sophomore English classes received 12 weeks of instruction with five components, including the use of: (1) the College Board's booklet, "Taking the SAT"; (2) a commercially prepared SAT preparation book; (3) teacher-made worksheets to strengthen vocabulary, reasoning, and reading comprehension skills; (4) a computer program used in groups of three or four students; and (5) a game format for motivation. Students were pre- and posttested with SATs and with teacher-made tests on reading comprehension. Students achieved SAT average verbal gains of 16.8 points. Those scoring under 400 on the pretest gained an average of 45.4 points. Students also showed small increases in ability to answer reading comprehension questions. Findings suggest that modifications to the English curriculum can produce modest gains in SAT verbal scores, particularly in low scores. (Twenty-five references, a 30-item bibliography, and appendixes containing the midcourse reading comprehension test and the reading comprehension posttest are attached.) (SR)

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MODIFICATIONS TO THE ENGLISH CURRICULUM TO PRODUCE IMPROVED SAT VERBAL SCORES IN ADVANCED TENTH GRADE STUDENTS

by

Donna S. Meredith

A Practicum Report

Submitted to the Faculty of the Center
for the Advancement of Education, Nova University,
in partial fulfillment of the requirements for the
degree of Educational Specialist.

The abstract of this report may be placed in a
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Abstract

Modifications to the English Curriculum to Produce Improved SAT Verbal Scores in Advanced Tenth Grade Students.
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The high percentage of high-level high school students not making minimum SAT verbal scores required by area colleges for placement in regular college course work was addressed in two advanced sophomore English classes. The 12-weeks of instruction had five components, including the use of (a) the College Board's booklet, "Taking the SAT," (b) a commercially prepared SAT preparation book (c) teacher-made worksheets to strengthen vocabulary, reasoning, and reading comprehension skills (d) a computer program used in groups of three or four students, and (e) a game format for motivation. Students were pre- and posttested with SAT's and with teacher-made tests on reading comprehension. Students achieved SAT average verbal gains of 16.8 points. Those scoring under 400 on the pretest gained an average of 45.4 points. Students also showed small increases in ability to answer reading comprehension questions. It was concluded that modifications to the English curriculum can produce modest gains in SAT verbal scores, particularly in low scorers.

Authorship Statement

I hereby testify that this paper and the work it reports are entirely my own. When it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practice. I give this testimony freely, out of respect for scholarship of other professionals in the field and in the hope that my own work, presented here, will earn similar respect.

Signed: Donna S Meredith

Students's name

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CHAPTER I

Purpose

A small south Georgia town of 20,000 was the setting for this research. Another 18,000 citizens reside within the county, but outside the city limits. About 150 manufacturing, wholesale, and processing firms provide employment for nearly 6,000 county citizens (Duke and Jackson, 1985). Approximately 8,500 county residents serve in professional, retail, and other white-collar jobs. A 1984 Chamber of Commerce survey revealed 27 percent of the households earned under $10,000 a year. Average household income was $17,788 in 1984 (Duke and Jackson, 1985).

This small community takes pride in providing cultural activities for residents through an entertainment foundation, a cultural center, music and drama groups, and an arts guild. Several wealthy patrons of the arts have helped to bring outstanding artists and musicians to town and at least once a year sponsor speakers and artists who visit the high schools to encourage young people's interests in the arts. The

community has a number of recreational activities available, including YMCA sports and fitness programs, golf courses, tennis courts, t-ball and soccer leagues, and music and dance lessons.

Several important features characterize the community. Religion is an important part of life for most residents, evidenced by about 100 churches in the area. Another feature of the community is the desire to preserve the life of an earlier era. Outsiders would notice this desire first in the many preserved homes from the late 1800s and early 1900s and the restoration of an old-fashioned downtown. Blacks and Whites still live in largely segregated neighborhoods and have segregated activities. For example, there is a YMCA for Whites and another one for Blacks.

Education is very important to the community. The city school district runs five elementary schools, two middle schools, and one high school with a total budget for the 1990 school year of $13,296,908. Nearly a third of the funding comes from local sources. The city high school has had a stable enrollment of around 1,000 students throughout the 1980s with a student body that is 66 percent Black and 34 percent White.

Great differences exist in the home environments

of the students. About one-third of the students' parents work in managerial or professional positions, yet slightly over one-fourth of the parents work in unskilled jobs. About one-fifth of the parents have at least a baccalaureate degree, and another third of the parents have had some formal education beyond high school. Yet the bottom fifth of the parents have not finished high school. With widely varying household income levels and education levels of parents, students clearly spring from a wide range of home settings, many from low socio-economic environments.

Many students go on to college. For the last self study done for the Southern Association of Colleges and Schools (SACS), a complete follow-up of 1982 graduates was done. At that time, 33 percent were attending a four-year college or university, while 8 percent were attending a junior or community college. Since 21 percent were in the Armed Forces, a number of the former students may have attended college after several years in the military. Most parents in the community told the SACS committee that the school should develop the full potential of students so that unlimited choices are available upon high school graduation: college, technical school, or employment. In the class

of 1989, 56 students were enrolled in college preparatory classes through high school. Yet at least one fourth of the 1989 graduates who took college preparatory courses graduated without the necessary academic background to obtain a sufficiently high Scholastic Aptitude Test (SAT) score to enter college-level classes at any of the four colleges most often attended by the target school graduates (Bass, 1990; Glass, 1990; Swann, 1990; Wasson, 1990). All of these students would be placed in developmental or remedial English courses at these colleges.

The nature of the community setting may contribute to the SAT deficits in several ways. First, 37 percent of the students qualify for free and reduced lunch (Conger, 1990), indicating a low-income home setting, a factor Johnson (1984) cites as related to performance on the SAT. Another factor which may contribute to students' SAT deficits is the ethnic composition of the student body. The school is composed of 60 percent Black students, and Blacks have traditionally scored poorly on the SAT in comparison with Whites (College Board, 1990a). Researchers have hypothesized numerous theories for this difference. One is that many Blacks do come from low-income families (Johnson, 1984).

Johnson reported another hypothesis that Blacks represent a unique sub-culture in America, and the SAT does not take unique cultural differences into account.

The researcher has taught high school English and journalism for 16 years, the last six in this setting. For the past five years, the researcher has been assigned several classes of accelerated sophomore English. These students are, with very few exceptions, well-disciplined and highly motivated. Nevertheless, after taking the school's most advanced-level English curriculum, at least one fourth of the students are not achieving high enough verbal SAT scores to avoid developmental studies classes in college, for which students receive no college credit.

The ideal in American education is that all students will have the opportunity to achieve all that individual capability permits. Reality often falls far short of that goal. A variety of social and economic factors often interact to prevent students from advancing as far as possible.

One test which can close the doors of opportunity for students is the Scholastic Aptitude Test (SAT). Most colleges use either the SAT or the American College Test (ACT) as a tool for admissions. Students

who do not achieve an acceptable SAT score are placed in developmental courses for which no college credit is given.

The researcher contacted the four colleges most often attended by students in the target school. Sizes range from a major university to a small local college with enrollment of only 500. The first college requires a 450 verbal score for admission to regular college courses (Glass, 1990). Another college places students in developmental studies if SAT scores fall below 900 (Swann, 1990). This school does not separate the verbal and math portions of the SAT for analysis, but about a 450 would be needed in each section to meet this standard. Only 38 percent of the 1989 graduates in the target school who had been enrolled in college preparatory classes met the requirement for these two colleges.

The third college looks at verbal and math scores separately (Bass, 1990). Students need a B (3.0) average and a 400 verbal score to avoid placement in developmental studies in English. Only 68 percent of the 1989 graduates enrolled in college preparatory classes met this standard. The fourth college requires a 370 verbal score, which 75 percent of these same

students met (Wasson, 1990). Yet one fourth of the target school's 1989 graduates who had enrolled in college preparatory curriculum throughout high school would be placed in developmental studies courses at any of these four colleges because of inadequate SAT scores.

Of those 66 seniors who tested in January 1990, nearly 68 percent scored below 400 on the verbal portion of the SAT, and thus could only be admitted to one of the four colleges contacted. Two-thirds of the 53 seniors in the target school who took the test in October 1989 posted verbal scores below 400. In October 1988, the results were similar: 60 percent of the 68 seniors who took the test scored below 400. According to test results, many students cannot make the cut-offs at these colleges.

The problem is not just one at the targeted school. In a 1989 state profile of SAT scores, the College Board reported that Georgia students with a B average (80-89) had an average verbal score of only 393 (College Board, 1989a). In 1990 the average verbal score for Georgia students with B averages fell to 391 (College Board, 1990b). The average verbal score for the state overall in 1989 was 402, but for females the

verbal average was just 395. About 59 percent of Georgia's graduates took the SAT in 1989 (College Board, 1989a). In 1990, the overall verbal score for the state fell to 401 (College Board, 1990b).

Nationally, the average verbal score of 427 is 22 points higher than Georgia's average, a cause of concern to state educators (College Board, 1989a). Yet verbal scores have fallen by 36 points nationally since 1969, a cause of concern for all American educators (College Board, 1989a). The national average verbal score fell for the fourth straight year in 1990, prompting the president of the College Board to ask for "a firm commitment from parents, educators, and public officials that the improvement of our students' verbal skills is one of the nation's most important educational goals" (College Board, 1990a:1). A final national figure worth examining is the performance of Blacks on the SAT. The average verbal score for Blacks in 1989 was 351, representing an increase of 21 points since 1979 (The College Board, 1989b). Although Blacks are clearly progressing in achievement on this test, most Blacks would not be admitted to college-level course work in any of the four institutions attended most often by the target school graduates.

The specific target group was 54 sophomores in the researcher's two advanced-level sophomore English classes. The group consisted of 15 Black females, five Black males, 15 White females, and 19 White males. Nearly all of these students have aspirations of attending college. Most students who are serious about wanting to attend college are in the advanced-level English classes when sophomores. As with previous classes in the target high school, these sophomores showed signs of not meeting the minimum SAT scores required by colleges. Of the 54 sophomores in the target group, 41 took the Preliminary Scholastic Aptitude Test (PSAT) in October 1990. The PSAT is widely used as a predictor of SAT scores. Of the 41 who took the PSAT, 43.9 percent posted scores that indicate the minimum 400 required by the three of the four most popular state colleges will not be met. The 450 verbal scores required by two of the top four colleges will not be achieved by 63.4 percent of these students, according to PSAT scores. In addition, 31.9 percent could not take regular courses at any of the four institutions contacted.

Some help is already available to students to improve the chances of scoring well on the SAT.

Getting familiar with the SAT format has been shown to have very modest, positive effects on test scores (Powers, 1988). While the school does offer a two-week after-school SAT coaching class each fall and sometimes a week-long class in the summer, many students, particularly those who must work, cannot attend these classes. Attendance is frequently very small for these coaching sessions.

With some modifications in approaches to teaching vocabulary and reading comprehension, the school's English curriculum could prepare these students to achieve acceptable SAT verbal scores. Current curriculum does not include in-depth treatment of analogy, sentence completion, and non-fiction comprehension skills. While the curriculum focuses attention on vocabulary development, little attention is focused on the thinking skills required to recognize antonyms and solve analogies, or on using context clues to select the best word for a sentence. Vocabulary exercises could be formatted more like SAT questions to foster thinking skills required by the SAT.

The same holds true for reading comprehension. The target school's English curriculum devotes much time to analysis of fiction, but very little time to

analysis and comprehension of non-fiction. Since SAT reading questions usually use science or social science passages, similar examples could be used in English classes. The emphasis of instruction need not be just on taking the SAT but on systematically increasing students' skills in ways that will produce better academic performance in both high school and college. Involved in test coaching for many years, Kaplan (1987:8) suggested that "the goal of an SAT preparation program should go beyond that of improved SAT scores. It should provide improved skills to insure better performance at the college level." The best courses are those several months in duration presented to small classes of about 25 students (Kaplan, 1987).

SAT verbal scores of one fourth of the graduates from the target high school are below college admission standards despite the students' completion of the school's college preparatory classes. When students do not reach the minimum scores set by colleges, students are placed in remediation classes. Regular undergraduate fees are charged for these courses although no college credit is earned. Modifications to the school's English curriculum and familiarizing students with the SAT format could raise student

performance on the test.

Three objectives were set for the practicum. The first was that after 12 weeks of specialized, SAT-focused instruction in vocabulary and reading comprehension, 54 advanced-level sophomore English students would raise verbal scores by 20 points or more on the SAT. This objective provided the 20 hours contact time that research indicated was needed to make an improvement in an SAT score. The goal of 20 points improvement seemed reasonable, based on other researchers' results with similar projects.

A second objective was that after 12 weeks of instruction in non-fiction reading comprehension, the 54 advanced-level sophomore English students would raise correct response rates on the reading comprehension portion of the SAT by at least five percent. Again, the contact time was sufficient to begin to have an impact on scores, and the five percent represented answering about two more reading questions correctly, a goal which seemed reasonable.

Finally, after 12 weeks of instruction in types of reading comprehension questions and strategies for solving each type of question, students would be able to recognize categories of questions asked and select

appropriate strategies for answering these questions with 80 percent accuracy, as measured by a teacher-made test. The 80 percent accuracy rate seemed reasonable since this last objective involved the application of critical thinking skills which could specifically be taught.

CHAPTER II

Research and Solution Strategy

Research

Research indicated that coaching can improve students' SAT scores although results produced by various programs have been inconsistent. The selection of appropriate strategies and the length of time over which instruction occurs appear to be critical to success. Examining the many strategies that failed to raise scores as well as those that succeeded was important, so that the same mistakes would not be repeated.

Powers and Alderman (1983) reported an expanded test-taking booklet, "Taking the SAT," had little effect on student scores. Educational Testing Services (ETS), which produces the SAT, expanded the test-taking booklet in the 1980s. The researchers used an experimental group exposed to the new booklet and a control group which used ETS's previous briefer test bulletin. The researchers did find that recipients of the new booklet guessed less often than the control

group, despite finding no difference in test scores. The recipients expressed slightly more confidence with respect to understanding directions, knowing how to budget time, and knowing test-taking strategies. In addition, students in the experimental group were more confident of not encountering unexpected types of questions. These attitude differences were statistically significant.

In a separate study Powers (1988) examined how much time students actually spent preparing for the SAT. Powers conducted a stratified random sample of 1986-87 SAT examinees, including 1,364 high school seniors and 911 juniors. Powers learned that the average time spent on all preparation activities was 10 hours; some students spent no time at all. These students did not read the test preparation booklet given to all registrants. Nearly half of all schools conducted some type of special programs to prepare students for the SAT.

Bangert-Drowns, Kulik, and Kulik (1984) used meta-analytic techniques on 108 studies on the effects of coaching on aptitude and admissions tests. The researchers found that by taking a practice test, students raised scores by .23 standard deviations, if

two parallel forms of the same test were used. Coaching had small effects on SAT scores, averaging .36 standard deviations, which would be equivalent to 15 points on the SAT scale of 200-800. Two studies the researchers examined, however, produced substantial gains. One was carried out by ETS researchers familiar with the SAT items pool. Another was the coaching program offered by the Stanley H. Kaplan Educational Center. Three factors appear to increase gains in scores: giving a pretest prior to coaching, practice on identical tests, and more practice on a regular schedule over a longer period of time.

In an analysis of 148 gifted students at three urban test sites, Reynolds and Oberman (1987) found that an intensive 63-hour Preliminary SAT (PSAT) program had significant positive effects on math scores. However, no significant effect was found for verbal scores. In fact, the control group not receiving instruction outperformed the experimental group. The program used Barrons' PSAT program, Gruber's Inside Strategies, and Strategies for Taking the SAT. The study used what was termed "typical instruction," centering around practice, drill, and feedback, and had no uniform curriculum. Students

selected for this program were restricted to those scoring in the seventh to ninth stanine on Tests of Achievement and Proficiency (TAP). No ethnic or background data on the students was provided.

Sesnowitz, Bernhard, and Krain (1982) examined research done by others on the impact of commercial test preparation courses on SAT scores. Alderman and Powers, as cited by Sesnowitz, Bernhard, and Krain (1982) studied eight secondary schools. Students were assigned randomly to special verbal SAT preparation classes or to control groups. None of the programs had much impact on the scores. One school, however, showed increases of 28-39 points on the average. To make an impact of real importance for students, the researchers suggested 60-point increases were needed. In the Federal Trade Commission's 1976 report on coaching schools, as cited by Sesnowitz, Bernhard, and Krain (1982), evidence was presented that coaching can work. The researchers noted, however, that many students who seek commercial coaching have scored below expectations previously and that this low performance is systematic. These students have a history of doing poorly on standardized tests. Thus, test-taking strategies may help these students more than others.

The Chicago Board of Education (1987) evaluated the 1986 summer program for test preparation for gifted and talented sophomores, a program in the fourth year. This six-week, 75-hour test coaching program aimed at teaching high-achieving sophomores techniques for doing well on the PSAT in hopes of producing more National Merit Finalists. Mathematics, language arts, and guidance were the focus of PSAT instruction in the three participating area high schools. English class activities included discussion, oral recitation, seat work on vocabulary and reading development, vocabulary handouts, practice exercises, and review of test-taking skills. Teachers rated Barron's as more effective than Inside Strategies for the SAT, noting the latter might have been more effective if copies had been available to all students. The study was flawed as a scientific study since only 93 of the 148 students participating were pre- or posttested. The comparison group was not systematically tested either. Educators found a 42 point increase in math scores, but no verbal coaching effects.

Johnson (1984) reported significant gains in SAT scores in a study of 215 inner-city, low-income Black students. Students were randomly assigned to one of

two sessions, and those not yet coached served as the control group. Bi-weekly sessions of two and one-half to three hours each were held for six weeks for a total of 30 hours of contact time. Average total SAT gains ranged from 24-49 points. These SAT clinics were sponsored by the National Association for the Advancement of Colored People in three cities: San Francisco, Atlanta and New York. Clinic teachers in San Francisco and Atlanta all reported significant overall gains in SAT scores. One clinic in New York had significant gains while the other did not. Also Atlanta students did not make significant gains in verbal scores. Researchers concluded that since the Atlanta group started out more deficient in verbal skills, those students needed more coaching time in that area. Students in each clinic did make some verbal gains: New York reported 11 points; San Francisco, 49 points; and Atlanta, 24 points. The author suggested that preparation for the SAT should include taking the PSAT and enrolling in a 40-hour course that included test-taking strategies and specific skill building in vocabulary and reading comprehension. Messick's synthesis of research, as cited by Johnson (1984), showed that short-term classes

rarely produced much change in student scores. Students need at least 40 hours contact in both verbal and math instruction for the coaching to have much impact.

Hulsart (1983) provided descriptive research of the test preparation programs in Colorado. Only 27 schools reported having these programs. Of those with test preparation programs, most schools offered coaching for one to two weeks prior to the test. A few offered semester-long courses on a voluntary, non-credit basis. Several schools reported setting up special units in English departments to prepare students. Instructional materials varied from school to school though content of the courses was similar. Time of contact varied from six to 40 hours. Schools made no attempt to measure the success of the programs in improving student scores.

Hulsart (1983) provided a guideline for setting up a two-week test preparation workshop. The first week centered on the ACT, providing a review of math, grammar, and reading comprehension. The second week focused on the PSAT/SAT. The first session began with an analysis of the overall content of the tests and review of test-taking principles. Session two was

devoted to math skills. The third and fourth sessions focused on verbal preparation, including an analysis of each question type, a review of the strategies for each question type, the administering of a sample test, and discussion of problems identified during the sample test with emphasis on solving each question. In the fifth session students reviewed any major problem areas identified. When students became confident of mastery, the instructor administered a full-length SAT.

Hulsart (1983) described the strategies used by Detroit Country Day School, whose students consistently have scored among the highest in the country on the SAT. According to the school's assistant headmaster, the purpose and content of the tests are explained to both parents and students. All tenth and eleventh graders are required to take the PSAT. Tests are reviewed with students to help with questions not understood. Finally, special preparation sessions are offered to students. The assistant headmaster attributed the school's success to solid academics, including a study of classical literature and much emphasis on grammar and vocabulary. The headmaster added that most vocabulary study is formatted like the SAT.

Hulsart (1983) offered specific techniques for improving SAT scores. These ranged from timing techniques to specific worksheets teachers could make to improve students' skills on SAT type questions. Among other strategies suggested were using Time, Newsweek, and Omni articles to teach reading comprehension skills. Hulsart also suggested that students practice identifying key words that tell whether the answer to a reading question is stated (according to the passage) or implied (judging from, the tone might be described).

Several newer pieces of research on SAT coaching have utilized computer-assisted instruction. Like previous attempts to improve student scores, the results of computer-assisted instruction are ambiguous. Computer-assisted test preparation is an area where more research needs to be done.

Coffin (1987) examined the use of computer-assisted instruction with inner-city students, whose average city-wide verbal score in 1985 was 354. The research involved 40 volunteer students: 20 in an experimental group and 20 in the control. Experimentals were exposed to 18 hours of self-directed work on Hayden's SAT preparation program over a six-

week period after school. The November administration of the SAT served as the pretest. Midway through the program, the researcher went into the lab and watched the students at work on the computer program. Coffin observed students' frustration and began to ask questions. The researcher learned that the vocabulary of both the questions and the responses was completely beyond students' comprehension. Rather than helping students, the program was totally demoralizing. Another problem noted was that attendance at the course was not mandatory and was haphazard at best. Verbal scores went down 22 points for the experimentals.

In the next round of research, Coffin (1987) used TestSense, the College Board's computer program for PSAT preparation. Scheduling during school hours resolved the sparse attendance of the first course. This second course lasted two and a half weeks. This time students' pre- and posttested on the PSAT showed verbal gains of 51 points and math gains of 40 points. These results are encouraging for the use of the computer as an aid to teaching test-taking strategies and techniques. Some students, however, commented at the end of the study that the course should not rely totally on computer instruction since some students are

not computer literate; and others, in fact, are computer phobic.

Davis (1985) assessed Krell's SAT preparation series on Apple microcomputers. Subjects were 48 college-bound juniors from Escambia County (FL), who were randomly assigned as experimentals or controls. Subjects were pretested with the SAT, the Otis Lennon School Ability Test, and the Witkin Group Embedded Figures Test. Then experimentals completed 15 hours of computer-assisted instruction. Both groups took the SAT as a posttest. Controls took the computer course, and both groups were posttested with SAT's again. Average SAT score gains were modest and deemed to be of little practical consequence. Davis noted, however, that individual score gains were sometimes high, consistent with the publisher's claims.

Hopmeier (1984) used Harcourt, Brace, Jovanovich's "Computer SAT" package on 93 subjects in ninth through eleventh grade geometry classes in Santa Rosa County (FL). Hopmeier used three groups: one experimental group working individually at computers, one experimental group working in small groups of three to four students at computers, and one control group. Experimentals received seven hours of computer-assisted

instruction, including three hours of verbal coaching. Hopmeier found no significant difference between the control group and the group working individually at the computer for verbal scores. There was a significant difference between the control group and the experimentals working in small groups at the computer. Total SAT scores improved by 13.8 percent when students worked in small groups. This represented an average jump from 680-774. Verbal scores jumped 18.3 percent. Powell's research, as cited by Hopmeier (1984) stated that this difference was usually what occurred after six months or more of participating in non-computer coaching programs. The researcher concluded that verbal scores can be increased by computer coaching based on a strategy of three to four students using a single computer, suggesting the students discuss the information. This discussion would appear to sharpen thinking skills and test-taking abilities.

Eraut and Hoyles (1989) explored the possibilities for group work at the computer for more general educational purposes. These authors have made a call for others to research the many applications of group work with computers. The scarcity of computers is likely to make group work a necessity, the authors

noted. A suggestion was offered that teachers need to exploit what group work can achieve rather than let computers sit idle because there are not enough for each student. The researchers said that many psychologists believe that group work is likely to be more effective in some areas of instruction. Eraut and Hoyles concluded that pupils must talk frequently to develop thinking skills.

Ryan and Brewer (1990) used a strategy called QAR (Question/Answer Relationship) to teach poor readers that a relationship exists between a question, the text, and the reader's existing knowledge. QAR's four question-answering formulae are (1) the words are right there in the text; (2) think and search--the answer must come from more than one sentence or paragraph; (3) the answer must be found in the reader's own knowledge; and (4) writer and reader--the answer is found in the reader's own background, but would not make sense apart from the text. This strategy helps students learn that not all answers are literal ones that come directly from the text.

Jefferson County High School (FL) used a game strategy to boost State Student Assessment Test (SSAT) scores (Kilpatrick, 1990). Kilpatrick reported that

the school went from having the lowest pass rate on Florida's basic math skills test in 1982 to the highest pass rate in 1983. Wall charts were kept on each individual indicating progress on each skill on the practice tests. Other motivational rewards, such as snack coupons, were provided to groups showing the most improvement. Kilpatrick noted that the rewards and the gimmicks changed from year to year to keep up student interest in the contests. After the school's success in raising SSAT scores, Kilpatrick used a military "mock war" strategy and computer SAT preparation programs to improve SAT scores. Only 12 students had signed up to take the SAT in 1983. In 1984 after the military strategy began, 75 participated in the preparation program and took the college entrance tests. Kilpatrick cited competition as a key to the students' success on tests.

Solution Strategy

One strategy that proved useful was going over the booklet "Taking the SAT," according to Powers and Alderman (1983). Although all students registering to take the test receive the book, the time students

devote to the book varies (Powers, 1988). A review of the booklet served to familiarize students with the test and make them more confident. Boosting students' familiarity with the test and confidence in approaching the test is a worthy goal.

Giving a pretest and providing practice on identical tests were two strategies that were used, as suggested by the analysis done by Bangert-Drowns, Kulik, and Kulik (1984). This analysis also suggested that having practice over a longer period of time on a regular schedule affected gains in scores. Since the practicum spanned 12 weeks, the length was sufficient to maximize gains. As part of the strategy, students went over the pretest thoroughly soon after the test was scored.

It did not appear that a program using just practice, drill, feedback was likely to have much effect on student SAT verbal performance, as evidenced by Reynolds and Oberman (1987). This research focused only on students who scored in the seventh to ninth stanine on TAP tests, and many of the students in the target group matched this description. Since the control group outperformed the experimental group in this research, duplicating this method was not

desirable. The Chicago Board of Education study (1987) focused on the same type of students with a similar traditional program and produced negligible results on verbal scores. Therefore, repetitive drills were avoided since advanced students tend to do poorly on these exercises, according to research. Johnson's (1984) study also was not to be duplicated. The study might have been somewhat flawed because actual SAT's were not the test instruments, and the report did not provide information on what coaching strategies were used. This lack of information made the instruction impossible to duplicate.

Commercial test preparation books were used as part of the strategy. Sesnowitz, Bernhard, and Krain (1982) suggested that for most students test preparation booklets have little impact, but for students who have previously performed poorly on standardized tests the impact can be great. Since so many students in the target school have done poorly on these tests, commercially prepared packages were deemed a useful component of the strategy. A class set of Gruber's Inside Strategies SAT preparation books were readily available from the library at the target school.

Hulsart (1983) contributed a guideline for setting up a workshop, which could be adapted for the target students' needs and restructured to focus only on verbal skills. The outline suggested this progression: test-taking strategies, analysis of each type of question on the test, and a review of problem areas. This sequence of instruction was logical. Hulsart also suggested taking a sample test to go over question by question with the goal of helping each student learn how to think through solutions. This strategy was useful not only in thoroughly familiarizing students with the test format, but also in applying thinking skills to each question. Reasoning behind each correct response needed to be shared student-to-student for best results.

A third strategy suggested by Hulsart (1983) was the use of specific exercises and worksheets that strengthen skills used on the SAT. Modelled after the successful Detroit Country Day School curriculum, regular classroom vocabulary questions were formatted like the SAT's. The researcher previously did weekly vocabulary with students, but not in SAT format. This change in format gave students the opportunity to apply thinking skills needed for the SAT to every day

vocabulary exercises, thus increasing students' practice with these skills. In addition, Hulsart suggested using passages from magazines and textbooks to teach reading comprehension skills. Hulsart's suggestions were more helpful than the vocabulary worksheets used by some of the unsuccessful studies because these suggestions focus on the development of reasoning and reading skills, not just drill on word lists. A selection of teacher-made worksheets was developed to improve student skills in all four verbal question types on the SAT. Non-fiction from Time, Newsweek, Omni, and similar magazines, as well as passages from college textbooks were used as the basis for reading comprehension worksheets. Because Detroit Country Day School has been so successful in boosting SAT scores, part of the solution strategy was modelled after this school's techniques with vocabulary and reading comprehension.

To further boost reading comprehension skills, the QAR technique (Ryan and Brewer, 1990) was introduced to students. Using the QAR formula, students learned to distinguish which questions can be answered by searching through the text and which questions require readers to use background knowledge. Many questions on

the SAT are not literal and require inference and judgment. Students could waste significant amounts of time rereading SAT passages for answers when the answers are not stated in the passage at all. Teacher-made worksheets were used to encourage students to use the QAR strategy to improve reading comprehension.

A computer test preparation package was used as one component of the strategy. To avoid the pitfalls of Coffin's (1987) work where students became frustrated, students had to already be familiar with the test and test-taking strategies before beginning computer-assisted instruction. Hopmeier's (1984) strategy of small groups working at one computer was the best strategy for computer-assisted instruction and was preferable to Davis's (1985) method of placing one student to a computer. The ideal is for students to share the reasoning behind each response while progressing through the program. Critical thinking skills are strengthened as students more skilled in answering verbal questions assist those who are having difficulty. Since both Coffin and Hopmeier were so successful using computer-assisted instruction to raise students' SAT verbal scores, part of the solution strategy included the use of computers. The target

school owns Barron's computer SAT preparation program and an IBM lab, which the researcher scheduled for class use. Most of the computer software packages for SAT preparation appeared to be comparable to one another. The Barron's package was available so no other was purchased due to the expense. Students were assigned to small groups to reason out the correct responses on Barron's computer software package.

As a motivational strategy, the entire project was approached as a game, with rewards for the class and individuals with the most improvement, as suggested by Kilpatrick (1990). The individual in each class showing the most improvement from pretest to midterm assessment received a reward. The researcher's two classes were pitted against each other to see which one could improve overall scores the most. The winning class received an appropriate reward at midcourse and at the time of the posttest.

To summarize, a combination of strategies was employed, including use of (a) the College Board's booklet "Taking the SAT," (b) a commercially prepared SAT preparation book, (c) teacher-made worksheets to strengthen reasoning skills and reading comprehension skills needed on the SAT (d) a computer program used in

groups of three or four students to a computer, and (e) a game component to provide motivation. The combined strategies were selected to overcome drawbacks to the application of any one strategy alone. For example, students who were computer phobic did not have to rely on learning SAT skills only by that method. The plan met the suggested length requirement for test coaching of 20 hours contact time per area. The solution strategy overcame the problem of after-school sessions, which cut into attendance, by incorporating the instruction into English curriculum. Finally, the game strategy with tangible rewards was designed to overcome any student apathy toward the instruction.

CHAPTER III

Method

Resources

Many of the target school's college preparatory students do not reach 400 on the verbal portion of the SAT, risking placement in developmental studies courses in college. To help these students improve verbal scores, the researcher provided SAT-focused instruction in two advanced-level English classes for 12 weeks. The objective was that students' SAT verbal scores would raise 20 points or more from pre- to posttest. Since reading comprehension is such an important skill and is part of the SAT's focus, the reading comprehension scores were examined separately. The objective was that students would make a 5 percent improvement in reading comprehension scores. Also students would be able to recognize various types of reading comprehension questions and select appropriate strategies for solving these questions with 80 percent accuracy.

Several people played roles in the practicum. The implementer of the practicum conducted all pre- and

posttesting, recorded all data, developed appropriate learning materials, and coordinated the instruction for the practicum. The practicum took place in the implementer's two advanced-level sophomore English classes. Another person involved in the practicum was the mentor, an instructor who successfully completed a practicum several years ago and teaches advanced-level sophomore English. This combination of experience with practicums and familiarity with the target group made the mentor a valuable resource person for the implementer. The mentor has taught after-school and summer courses in SAT improvement to students, thus having familiarity with the subject of this practicum. Also, instructors in the computer lab made arrangements to move computer classes to the implementer's classroom on days when the lab was needed for SAT instruction. Finally, the principal consented to the practicum and offered all the resources of the school to assist in implementation.

During the first week of implementation, students were pretested using an SAT published by ETS. Because class periods were only 55 minutes, the pretest took two days. The 30-minute per section time restrictions were strictly enforced. The researcher recorded scores

for each student. Many of these students had taken the PSAT in the fall. When the researcher compared the pretest scores to the PSAT scores, it was determined that six students had most likely not put any effort into taking the pretest since test scores had fallen 100 points or more. Each of these six had very high scores on the PSAT in the fall, ranging from 440-580. Rather than eliminate these students from the practicum sample, the researcher opted to use the fall PSAT score as the pretest score for these six students. These differences in actual test scores and classroom simulations pointed out a problem that the researcher had not anticipated: some students already had reasonably high SAT scores and had no interest in improving.

One major strategy for motivating students to make the best possible effort was competition between the two classes with incentives and rewards for the class that improved the most. This strategy was used throughout the implementation. Classes accrued points for successful completion of various tasks and best class performance on quizzes as well as for demonstrating most improvement on the posttest. The instructor explained the competition and rules to

students during the first week. As each class earned points, the scores were displayed on a wall chart in the classroom. Every individual who met or exceeded the goals received a reward. The classroom competition proved motivating for the class that was ahead from the very beginning, but completely unmotivating for the other class, which as a group was just not competitive in nature.

Each week the instructor distributed a list of words that often appear on the SAT. Whenever possible, these word lists were coordinated with the literature studied. The instructor provided exercises modelled after SAT formats using these words. Words were reviewed daily, and each week ended with a quiz on the words. This activity took approximately 80 minutes of classroom instruction time a week.

During the first week, students formed small groups of three or four, which remained constant throughout implementation. These groups were carefully formulated to provide a mix of academic abilities. Both high and low achievers on the pretest were mixed in each group. The first worksheets each week that introduced a new skill were completed in small groups to allow students to develop the necessary thought

processes for answering the questions. Follow-up worksheets were completed individually. At the end of the first week, students received graded PSAT's. Each group was given a key to the test. Students then discussed reasoning skills needed to reach correct responses for each question missed. This activity took 45 minutes.

During the second week, the students read "Taking the SAT," the test preparation bulletin published by ETS. Copies were provided free to the school to give students test-taking tips. The week's instruction focused on antonym-solving skills. First, students read Gruber's Inside Strategies for advice on antonym solving, an activity which took 30 minutes. In 15 minutes, students completed a teacher-made worksheet on recognition of the three grammatical forms found in the antonym section of the test. The week's vocabulary worksheets focused on antonym-solving. At the end of the week, students went to the computer lab to complete the introductory portion of Barron's computer test preparation program and the antonym section of the computer software program. Students worked in groups of three or four at the computer in carefully selected blends of high and low scorers on the pretest. This

activity took 55 minutes. The teacher developed, administered, and graded a quiz on the week's word list and mastery of antonym-solving skills.

Reading comprehension was the focus of the third week's instruction. After reading Gruber's tips, students completed a teacher-made exercise designed to help students differentiate between main idea and inference questions. Students used the QAR method to distinguish between questions which could be answered from the text and questions which must be answered by reasoning and logic. These activities lasted 55 minutes. Students then read a non-fiction piece from a magazine or textbook related to the fiction being studied in class. After reading the non-fiction, students answered reading comprehension questions, activities which took 30 minutes. At the end of the week, students completed the reading comprehension portion of the computer package. The computer session took 55 minutes. The vocabulary quiz for the week combined antonym and a few reading comprehension questions on words used in context.

The fourth week's instruction concentrated on analogy-solving skills. Students read Inside Strategies for tips on analogies and completed analogy-

focused worksheets on the week's vocabulary list. These activities took 40 minutes. On another day in small groups, students developed analogy questions on characters studied in literature. Groups traded questions to solve. This activity took 30 minutes. Later in the week, students read another non-fiction piece related to fiction being studied in class and answered comprehension questions in approximately 25 minutes. At the end of the week, students spent a class period in the computer lab to complete the analogy section of the test preparation package.

During the fifth week, instruction focused on sentence completion techniques. Students read Inside Strategies for tips prior to completing worksheets on sentence completion, which took 40 minutes of class time. Vocabulary from the past four weeks was used on these worksheets. Students orally recalled antonym and analogy solving techniques, a review lasting five minutes. Finally, students worked through the sentence completion portion of Barron's computer test preparation package in a class period.

During the sixth week, students reviewed the four types of verbal questions on the SAT and took a true-false quiz on test-taking techniques and strategies for

approaching various portions of the test. These activities took approximately 45 minutes. The week's vocabulary worksheets and quiz dealt with all four question areas.

At midpoint in the implementation, students took a shortened version of an SAT. The average midterm SAT showed no improvement over the pretest. The instructor could identify no specific area causing confusion, so instruction was intensified in all areas. Reading comprehension scores were compared and showed no improvement. Further instruction in non-fiction reading techniques was offered. Failure to improve did not appear to be related to not finishing enough questions. After-school coaching by the instructor or by the computer coaching program was available to any students having difficulty, but none came in for help.

The researcher pinpointed motivation as a problem, particularly in the class which had been behind in the class competition from the beginning and in a few students who had acceptably high PSAT scores in the fall and felt no need to improve. Some of these students asked prior to each test if the grade was going to count and then did poorly upon learning the test did not count as a grade. This problem was not

consistent with every student who already had good scores; in fact, several who had scores around 600 became very competitive with each other and posted improvements despite the difficulty in raising scores in that range. Yet the problem was serious enough that the researcher had to finally address the issue by tying performance on the SAT posttest to a classroom grade. This change in the motivation component of the practicum was not made until after the midcourse test. Students were given a 100 English grade for doing as well on the posttest as the pretest (or the fall PSAT if the pretest score had been rejected by the researcher). If students improved scores, extra points were added into English grades. If students regressed by more than 40 points, points were deducted from grades.

In the seventh week of instruction, students read another non-fiction article and answered reading comprehension questions, taking 30 minutes. The target group took a teacher-made midcourse corrections quiz (See Appendix A) on recognizing types of reading questions on the SAT and selection of appropriate strategies to solve the questions. The quiz took 30 minutes. The implementer announced the quiz would be

graded. Students were able to recognize types of questions with 67.7 percent accuracy and select appropriate responses with 55 percent accuracy. Actually choosing the correct answer happened only with 38 percent accuracy. The week's vocabulary worksheets focused on all four verbal areas.

During week eight, students in small groups made SAT-type questions for vocabulary lists spanning the eight-week instructional period. Each class formed an SAT-style test from this question bank. The next day classes exchanged and took these tests for practice and for a grade. These activities took 60 minutes. Students also had a new list of words to learn and were quizzed on the list as usual with questions modelled after the SAT.

During week nine, students completed another non-fiction reading comprehension exercise in 30 minutes and did the usual worksheets on the week's vocabulary list. Students spent two hours in the computer lab taking a full-length simulated SAT. The computer program provided immediate feedback and recording of scores. Students participated in a vocabulary bee with students competing against others in the class for 30 minutes. Students were very motivated and enthusiastic

about the vocabulary bee.

In the tenth week of instruction, another vocabulary bee was held for 30 minutes. Students completed another reading comprehension passage with questions in 30 minutes. During the eleventh week, students held the third and final vocabulary bee for 30 minutes. A comprehensive vocabulary quiz over all the words covered during the past 11 weeks was administered in about 35 minutes.

During week 12, students orally reviewed test-taking techniques for 15 minutes. The instructor administered a full-length (60 minutes) verbal portion of the SAT as the posttest, recorded scores, and rewarded the winning class and individuals appropriately. Students also took a 30-minute teacher-made test on reading comprehension. The researcher scored and recorded the grades.

Evaluation

For the first two objectives, students were evaluated, both pre- and posttest, by full-length verbal portions of SAT exams. The pretest was administered and scored during the first week of implementation. The posttest was administered and

scored during the twelfth week of implementation. The implementer made a table comparing pre- and posttest scores for each student in the target group.

The first goal that each student would improve verbal scores by 20 or more points was not met. The average beginning SAT verbal score was 408. After the instructional activities were completed, the average SAT score in the target group was 424.8. Students posted 16.8 points improvement from pre- to posttest. The most significant increases came to those students who began with verbal scores under 400. Of those 24 students who started with scores under 400, averages gains were 45.4 points. Even though the objective was not met, 10 of the 54 students did move scores from below 400 to above 400, thus increasing chances of college admission in Georgia. Individually, 30 of the 54 students improved scores by 20 points or more.

The second goal for each student to produce a five percent improvement in reading scores was not met. A four percent increase was made from pre- to posttest. On the pretest, students answered 39.7 percent of the reading comprehension questions correctly. On the posttest, students responded correctly to 43.7 percent of the questions correctly.

The third objective of recognizing types of reading comprehension questions and selecting appropriate strategies for solving these questions with 80 percent accuracy on a teacher-made test (See Appendix B) was met. Students in the target group identified the types of questions asked with 86.2 percent accuracy. The target group selected appropriate strategies to solve the questions with 81 percent accuracy. Despite recognizing the types of questions and knowing appropriate strategies for responding to the questions, students could only correctly respond to the questions with 46.6 percent accuracy. Students did make improvements in every part of this objective during the instruction. Students improved 18.5 percent from midcourse to posttest in ability to recognize types of questions, and students improved 26 percent in appropriately choosing strategies for solving questions. Actually choosing the correct answer on the teacher-made test improved 8.6 percent from pre- to posttest. The greater improvement on the teacher-made test in comparison with the correct responses to reading questions on the actual SAT might be explained because the teacher-made test was not timed or because performance on the

teacher-made test was more subject to influence by coaching than the SAT.

At the end of instruction, students in the target group were surveyed anonymously concerning the SAT instruction, with one student absent and therefore not responding. Of 53 students in the target group, 50 said that SAT instruction should continue in the English classroom, and three said the instruction should not continue in the classroom. Of the target group, 29 felt the length of time spent on the instruction was appropriate, while 12 felt the instruction's duration was too short and 12 felt instruction was too long. The instruction made 77 percent of the target group more comfortable about taking the test.

In the instructor's average-level classes, who had heard about the project from other students, students asked for similar instruction. While there was not time to administer appropriate long-term instruction during this school year, some SAT instruction was provided. At the end of the year, the average-level students were surveyed. Of 36 students, 34 wanted the English classroom to offer SAT instruction.

After discussing the results of the practicum with

the principal, including the survey responses, the school decided to continue to modify the English curriculum to produce improved SAT scores. The principal agreed that the program be extended to average level classes next year, particularly since those students who scored under 400 were those most likely to produce significant score increases. To learn if greater score gains could be achieved by extending practice time, modification of most vocabulary exercises and quizzes during the school year to an SAT format seems appropriate .

CHAPTER IV

Results

The evaluation design for the first two objectives included a pre-and a posttest, both verbal portions of SAT's published by ETS. The SAT is an objective test, containing two 30-minute verbal sections: antonym, analogy, sentence completion, and reading comprehension. The test is designed to predict how well students will perform in college, emphasizing vocabulary, reasoning skills, and reading comprehension. The typical SAT contains two verbal sections which are scored. One verbal section will contain 15 antonyms, 10 analogies, 10 sentence completions, and 10 reading comprehension questions (two passages). The other verbal section will contain 10 antonyms, five sentence completions, 10 analogies, and 15 reading comprehension questions (three or four passages). All questions are multiple choice format and are gridded in on an answer sheet to be machine graded.

The practicum was not completely successful in

that two of the three objectives were not completely met. The first objective was that students in the target group improve verbal scores by at least 20 points on a scale from 200-800 as measured by the SAT. The results of the pre- and posttest were compared for each student to measure progress. The average beginning SAT verbal score was 408. After the instructional activities were completed, the average SAT score in the target group was 424.8. Students posted an average of 16.8 points improvement from pre- to posttest. The most significant increases came to those students who began with verbal scores under 400. Of those 24 students who started with scores under 400, average gains were 45.4 points. Even though the objective was not met, 10 of the 54 students did move scores from below 400 to above 400, thus increasing chances of college admission in Georgia. Individually, 30 students of the 54 met the goal of improving 20 points or more.

The second objective was that students would improve reading comprehension skills as evidenced by a five percent increase in correct responses to the reading comprehension questions of the SAT. This objective was not met. Again an SAT was used as both

pre- and posttest. The individual student's scores on the reading comprehension portion were compared by the researcher to determine if instruction resulted in improvement of at least five percent. On the pretest, students answered an average of 39.7 percent of the reading comprehension questions correctly. On the posttest, students responded correctly to 43.7 percent of the questions correctly, thus posting a gain of four percent.

The third objective was that students would identify the types of reading comprehension questions used on SAT's and select appropriate strategies for responding to the questions with 80 percent accuracy, as measured by a teacher-made test. The test (See Appendix B) consisted of reading a college textbook passage and responding to multiple choice questions identifying the types of questions asked and writing explanations of techniques that might be used to solve particular questions. Students then tried to answer the reading comprehension questions. This third objective was met. After instruction in identifying types of questions and applying appropriate strategies to solve the questions, students in the target group identified the types of questions asked with 86.2

percent accuracy. Students selected appropriate strategies to solve the questions with 81 percent accuracy. Despite recognizing the types of questions and knowing appropriate strategies for responding to the questions, students could only correctly respond to the questions with 46.6 percent accuracy.

After six weeks of instruction, the researcher administered a mini-version of the SAT. This version was the verbal portion of an SAT reduced to 30 minutes. Questions were carefully pulled from the beginning, middle, and end of each section, as the position in the section usually is tied to the question's difficulty. The questions generally become progressively more difficult. The midcourse test indicated little progress had been made toward the goals. The average SAT score posted on the midterm test was 408.2. The instructor intensified instruction in each area of the test since all areas needed improvement. Motivation to perform well on a test that doesn't count for actual college admission or a grade was also deemed a problem. The posttest was then tied to a grade in the English classroom.

CHAPTER V

Recommendations

Some educators may be interested in reproducing the instruction in this practicum since low SAT scores plague so many students today. The research indicated that significant improvements averaging 45.4 points could be made by students who began with SAT scores below 400. Classrooms where many of the students begin with scores under 400 may find the teaching techniques outlined in this practicum useful. However, overall improvements in verbal scores in advance level English classes averaged 16.8 points. The program produced less improvement for students who began with SAT scores over 400.

The researcher approached the principal of the target school and suggested that the SAT improvement program become a regular part of the English curriculum. The principal agreed, adding that the instruction should be extended from the advanced level English classes into average level English classes.

A manual of the instructional sequence and techniques will be distributed to other teachers in the

school who are interested in implementing the SAT improvement program next year. The principal will not be requested to distribute the manual to other school systems through district resource offices of the State Department of Education until further refinements to the program can be made. More research is needed to see if the results hold true for another group of advanced students and if the results can be duplicated with average level students. If test data from next year's advanced and average level students show improvements of 45 or more points in those scoring under 400, the program will be extended throughout the target high school English classrooms, and other school districts may be interested in duplicating this project.

Follow-up study should be done on the target group to see if the gains made during the research project hold or increase as the students take the SAT as juniors or seniors. A higher than expected performance on subsequent SAT's taken by these students could give further justification for the continuation of the teaching techniques used and developed in this practicum. On the other hand, if the gains dissipate, the school system may learn that this particular type

of classroom instruction doesn't produce long-term changes in scores.

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Appendix A

MIDCOURSE READING COMPREHENSION TEST

DIRECTIONS: Read the textbook passage. Then circle the best response on multiple choice questions. Write in appropriate responses in complete sentences where requested.

1. The statement best supported by the passage is
a.) Because of its advantages real estate is the best investment for most people.
b.) Real estate investments should be avoided by most people because they can lead to financial ruin.
c.) Carefully chosen properties can provide income and tax benefits for investors.
d.) Farms represent the largest share of investments made in real property.
e.) Inflationary times cause the value of real estate investments to depreciate.
2. The above question centered on
   a.) main idea
   b.) information stated in passage
   c.) asking me to draw a conclusion
   d.) contextual meaning
   e.) tone or attitude of author
   f.) organization or technique
3. A strategy I can use for solving this question is:

4. The author makes his central points by moving from
a.) generalizations to specific examples.
b.) definitions to reasons for investing to effects of investments
c.) classification to advantages to disadvantages
d.) comparison to contrast
e.) historical background to present day investments
5. The above question centered on
   a.) main idea
   b.) information stated in passage
   c.) asking me to draw a conclusion
   d.) contextual meaning
   e.) tone or attitude of author
   f.) organization or technique

6. A strategy I can use for solving this question is:

7. The best title for the passage would be
a.) Advantages of Real Estate Investments
b.) The Decision to Buy or Rent
c.) Major Areas of Real Estate Investments
d.) Principles of Investment
e.) Real Estate Investments

8. The above question centered on
   a.) main idea
   b.) information stated in passage
   c.) asking me to draw a conclusion
   d.) contextual meaning
   e.) tone or attitude of author
   f.) organization or technique

9. A strategy I can use for solving this question is:

10. In the last paragraph the word "liquidation" means the process of
a.) going bankrupt
b.) converting holdings into cash
c.) changing a solid into a liquid
d.) refinancing
e.) measurement of gain or loss

11. The above question centered on
   a.) main idea
   b.) information stated in passage
   c.) asking me to draw a conclusion
   d.) contextual meaning
   e.) tone or attitude of author
   f.) organization or technique

12. A strategy I can use for solving this question is:

13. From this passage readers could infer that
a.) Real estate holdings can offer substantial returns for investors
b.) Credit for real estate investments is harder to obtain during deflationary periods.
c.) Real estate is generally considered a fail-proof investment since land is always valued.
d.) Buying real estate with the sole intent to rent it

may carry significant tax draw-backs
e.) Homes are a better investment than unimproved property.

14. The above question centered on
    a.) main idea
    b.) information stated in passage
    c.) asking me to draw a conclusion
    d.) contextual meaning
    e.) tone or attitude of author
    f.) organization or technique

15. A strategy I can use for solving this question is:

Appendix B

POSTTEST ON READING COMPREHENSION

DIRECTIONS: Read the textbook passage. Then circle the best response to multiple choice questions. Write in appropriate responses where requested in complete sentences.

1. Which of the following are true:
   I. Rogers feels that children are born with the ability to make constructive, well-thought out choices for themselves.
   II. Rogers beliefs are closely aligned with Freud's.
   III. Rogers believes nearly all human are basically similar.

a.) I b.) II c.) III d.) I, II e.) I, II, III

2. The above question centered on
   a.) main idea
   b.) information stated in passage
   c.) asking me to draw a conclusion
   d.) contextual meaning
   e.) tone or attitude of author
   f.) organization or technique
3. A strategy I can use for solving this question is:

4. The primary purpose of the passage is to
a.) explain Gordon's Teacher Effectiveness Training to future teachers
b.) explain the philosophical background to Rogerian psychological theories.
c.) to compare and contrast several popular theories ascribed to by top psychologists, such as Rogers, Freud, and Maslow.
d.) to explore the ability of children to make rational decisions for themselves.
e.) to describe problem-solving techniques used by Rogers and Gordon.
5. The above question centered on
   a.) main idea
   b.) information stated in passage

c.) asking me to draw a conclusion
d.) contextual meaning
e.) tone or attitude of author
f.) organization or technique

6. A strategy I can use for solving this question is:

7. The attitude of the author towards Rogerian theory can best be described as
a.) enthusiastic embracing b.) embittered rejection
c.) sarcastic lampooning d.) noncommittal description
e.) half-hearted endorsement

8. The above question centered on
a.) main idea
b.) information stated in passage
c.) asking me to draw a conclusion
d.) contextual meaning
e.) tone or attitude of author
f.) organization or technique

9. A strategy I can use for solving this question is:

10. In the next to the last sentence of the last paragraph, the author uses the word "vehicle" to describe
a.) a contrivance for carrying persons b.) a sweet liquid to carry medicines c.) a means by which thoughts are made known d.) a liquid with which pigments are mixed for use e.) a play thought of as a means of communication.

11. The above question centered on
a.) main idea
b.) information stated in passage
c.) asking me to draw a conclusion
d.) contextual meaning
e.) tone or attitude of author
f.) organization or technique

12. A strategy I can use for solving this question is:

13. The phrases which best describe the development of the passage would be
a.) causes followed by detailed description

b.) comparison followed by description
c.) comparison followed by contrast
d.) definition followed by application to classrooms
e.) historical background followed by explanation of theory

14. The above question centered on
    a.) main idea
    b.) information stated in passage
    c.) asking me to draw a conclusion
    d.) contextual meaning
    e.) tone or attitude of author
    f.) organization or technique
15. A strategy I can use for solving this question is:

16. The passages are most likely directed toward
a.) first year psychology students b.) doctoral candidates in psychology c.) guidance counselors d.) classroom teachers e.) child psychologists
17. The above question centered on
    a.) main idea
    b.) information stated in passage
    c.) asking me to draw a conclusion
    d.) contextual meaning
    e.) tone or attitude of author
    f.) organization or technique
18. A strategy I can use for solving this question is:

19. A proponent of Rogerian psychology most likely would agree that
a.) children cannot be trusted to make their own decisions b.) children can verbalize their way through problems to make their own decisions c.) young children need a teacher to solve their problems for them d.) children are basically selfish and need to be directed away from their animal instincts e.) parents should tell children what decisions are their best choices in each situation.
20. The above question centered on
    a.) main idea
    b.) information stated in passage
    c.) asking me to draw a conclusion
    d.) contextual meaning
    e.) tone or attitude of author

f.) organization or technique

21. A strategy I can use for solving this question is: